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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Paul J. Rankin

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

SALUJA, DALPREET S

ART UNIT

PAPER NUMBER

3609

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/015,851	Applicant(s) RANKIN, PAUL J.	
	Examiner Dalpreet S. Saluja	Art Unit 3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/1/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10015851.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/10/2001</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement filed on 10 December 2001 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/015581, filed on 10 December 2001.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. **Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.** If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.

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(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step(s) is a description of the result of a user opting not to send the recorded information for validation. Without this information, one of ordinary skill in the art will not know, for example, at what point the process will restart or the indicia for restarting the process. For purposes of this examination, the Examiner will interpret this claim as stating that the user has the option to opt out of sending the recorded information until he chooses to restart the process.

6. **Claim 21** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation *code for carrying out the steps of recording in the memory store information based on the broadcast identification data sets and causing the mobile device to transmit the recorded information to a verification*

system so that the length of time the mobile device remains within the vicinity of the beacon can be determine and the user of the mobile phone reward for remaining in the locale in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. **Examiner's Note:** The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-5, 7, 8, 11-13, 15, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow, WO 00/62564 (hereinafter referred to as "Blow") in view of Hewlett-Packard's "Cooltown" project available at www.cooltown.hp.com, accessible from www.archive.org (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location Awareness in HP's*

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Cooltown by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown").

10. **Claim 1:**

- Blow teaches *crediting the mobile device to reward the user of the mobile device for presence within that locale* (see pg 4, line 23 – pg 5, line 11). Blow teaches this limitation by illustrating a mobile device through which a user can engage in interactive media based on her position (see pg 4, lines 23-25) and is given a billing discount the longer they participate in the media (pg 5, lines 3 – 8).
- Blow, however, does not teach *communicating between a beacon and a mobile device to determine whether the mobile device is within a predetermined locale*. CoolTown does teach such a limitation (see Kindberg, et al, at page 4, §2.3 and generally in §2).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Blow, wherein a method of providing discounts to nomadic mobile users for tolerating advertisements is taught, with the teaching of CoolTown, wherein the use of beacon to locate an object is taught, because the use of short range transceivers such as beacons to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and using this mechanism to provide an incentive, such as discounts, to "nomadic" users would provide

more profits and stronger brand image for the retailer patronized by that mobile user.

11. **Claim 2:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above.

- Furthermore, Blow teaches *the mobile device is credited with an amount depending on the length of time the mobile device is within the predetermine locale to reward the user of the mobile device for continued presence within that locale* (page 5, lines 3 – 11 and page 10, lines 21 – 25).
- Blow illustrates this limitation by disclosing a mobile device that is given a discount for the increased time spent engaging in interactive media through the completion of polls and questionnaires based on the user's location.

12. **Claim 3:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above.

- Furthermore, Blow teaches *wherein the mobile device is credited if the mobile device is within the predetermined locale within a predetermined time interval* (see page 6, lines 36 – 38 and page 9, lines 9 – 11).
- Specifically, Blow illustrates an advertising mechanism through which advertisers designate their advertisements to be shown during a specific timeframe and provide credit to those users who tolerate those advertisements during that time.

13. **Claim 4:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above. Furthermore, Blow specifically teaches:

- *Broadcasting... signals that can be received within the predetermined locale.*
(page 2, lines 1 – 2; Page 6, lines 7 - 9);
- *Receiving the signals...on a mobile device when the mobile device is within the locale* (page 2, lines 2 – 16; page 6, lines 7 - 14);
- *Sending an identification signal from the mobile to a verification system*
(Abstract, lines 5 – 7 and pg 2, lines 10 - 28);
- *Determining in the verification system the time that the mobile device is within range...*(page 2, lines 14 – 16; Page 13, lines 5-8); and
- *Crediting the mobile device identified by the identification signal* (Page 4, lines 22 - 26).
- Blow, however, does not explicitly teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since the use of short range transceivers such as beacons to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and using this mechanism to provide rewards to “nomadic” users would provide more profits and stronger brand image for the retailer patronized by that mobile user.

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14. **Claim 5:**

- Blow in view of CoolTown teaches the method of Claim 4 as detailed above.
- Blow further teaches ... *to credit the identified mobile device when the mobile device is in connection...*(Page 7, lines 1-3 and page 11, line 4).
- Blow, however, does not teach the additional recited elements. Specifically, CoolTown does teach:
 - *The mobile device makes a connection with the beacon when within range* (Kindberg, et al, pg 8)
 - *The beacon receives the identification signal from the mobile device through the connection* (Kindberg, et al, pg 8)
 - *The beacon passes the identification signal to the verification system...when the mobile device is in connection with the beacon* (Kindberg, et al., pg 8)
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Blow, wherein a credit is provided to mobile users once located, with the teaching of CoolTown, wherein a method is shown of identifying a mobile device and inputting information to it, since the use of short-range transceivers, such as beacons, is one mechanism for locating a user and transferring any information to them, whether it be credits or location information.

15. **Claim 7:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above. Furthermore, Blow teaches the method of:

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- *Broadcasting a sequence of identification data sets...* (Page 2, lines 7-10)
- *Recording in the mobile device information based on the broadcast identification sets* (Page 2, lines 9 – 12)
- *Presenting the recorded information for verification to determine the length of time the mobile device remained within the vicinity...* (Page 2, lines 12 – 19)
- *Crediting the mobile device with credit if it is determined that the mobile device was within the vicinity...* (Abstract, lines 7 – 10; page 3, lines 12 – 15; and page 7, lines 1-3)
- Blow, however, does not explicitly teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since the use of short-range transceivers, such as beacons, to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and incorporating a processing system which manipulates information would assist in providing rewards to “nomadic” users, thereby resulting in increased profits and stronger brand image for the retailer patronized by that mobile user.

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16. **Claim 8:** Blow in view of CoolTown teaches the method of Claim 7 as detailed above. Furthermore, Blow teaches *the step of presenting the user of the mobile device with an option to send the recorded information for validation, and of presenting the recorded information for verification when the option is selected* (Page 7, lines 31 – 34).

17. **Claim 11:** Blow in view of CoolTown teaches the method of Claim 7 as detailed above.

- Furthermore, Blow teaches *wherein the data sets ... include a locale identifier indicating the locale and a time or sequence number that records the time* (pg 2, lines 5-10 and pg 12, line 36 – pg 13 line 2).
- Blow, however, does not explicitly teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since the use of short-range transceivers, such as beacons, to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and using this mechanism to provide rewards to “nomadic” users, based on their presence and time in a certain locale, would provide higher profits and stronger brand image for the retailer patronized by that mobile user.

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18. **Claim 12:** Blow in view of CoolTown teaches the method of Claim 7 as detailed above.

- Blow further teaches:
 - *Transmitting information recorded by the mobile to an intermediary (pg 12, line 36-37);*
 - *Communicating information regarding the data sets broadcast ... to the intermediary (pg 12, line 39 – pg 13, line 2);*
 - *Comparing in the intermediary the information received from the mobile device with the information regarding the broadcast data sets to determine the length of time that the mobile device is within a locale (pg 12, line 39 – pg 13, line 7); and*
 - *Outputting a credit to the account of the user of the mobile device (pg 13, line 8 – 9).*
- Blow, however, does not explicitly teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since the use of short-range transceivers, such as beacons, to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and

incorporating an intermediary which manipulates information would assist in properly distributing rewards to "nomadic" users, thereby resulting in increased profits and stronger brand image for the retailer patronized by that mobile user.

19. **Claim 13:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above.

- Blow does not explicitly teach *wherein the mobile device and the beacon communicate using Bluetooth protocols*.
- CoolTown, however, does teach such a limitation (A Field Guide to CoolTown, page 1, see "Beacons").
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since Bluetooth technology was a typical communications protocol.

20. **Claim 15:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above. Blow also teaches the step of *crediting the mobile device sends an electronic coupon exchangeable for goods or services to the mobile device* (page 4, lines 35-37 and page 11, line 4).

21. **Claim 16:** Blow in view of CoolTown teaches the method of Claim 1 as detailed above. Blow also teaches *wherein the step of crediting the mobile device credits an*

account corresponding to the user of the mobile device (page 5, lines 6-11 and page 7, lines 1-3)

22. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Blow, WO 00/62564 (hereinafter referred to as "Blow") in view of Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location Awareness in HP's Cooltown* by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown") and, further, in view of Law, et al., US 2001/0056501 A1 (hereinafter referred to as "Law").

23. Blow in view of CoolTown teaches the method of claim 7 as detailed above.

- Blow in view of CoolTown does not teach *wherein the mobile device and the beacon communicate using Bluetooth protocols and the data sets broadcast by the beacon are embedded in the inquiry phase of a Bluetooth message signal*. Law does teach such a limitation (¶¶ 0023 – 0024).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of CoolTown in view of Blow with the teaching of Law. It would have been obvious to one of ordinary skill in the art because this is the typical configuration used in a Bluetooth communication (Law, ¶ 0023).

24. **Claims 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al.,

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Location Awareness in HP's Cooltown by V. Krishnan, and *HP's A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown") in view of *Blow*, WO 00/62564 (hereinafter referred to as "Blow").

25. **Claim 17:**

- CoolTown teaches:
 - *a beacon for transmitting signals to be received by mobile devices within range of the beacon* (Krishnan, pg 2); and
 - *A verification system for receiving a signal from a mobile device, identifying the mobile device, determining whether the mobile is or was within range of the beacon* (Krishnan, pg 2 where the Web receives the URL that is transmitted to the mobile device)
- CoolTown, however does not teach the further limitation of *crediting the mobile device if the mobile device was within range*. Blow does teach such a limitation (Page 10, line 17 - page 11, lines 3).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of CoolTown, wherein a system involving a beacon and the transfer of signals to a mobile device based on location is illustrated, with the teaching of Blow, wherein a method is demonstrated where interactive media can be based on the position of the mobile user and, accordingly, discounts provided for participation. It would have been obvious to one of ordinary skill in the art because such a system would provide an incentive to users to patronize a

certain location while providing further revenue and brand image for the venue.

26. **Claim 18:** CoolTown in view of Blow teaches the system of Claim 17 as detailed above. Furthermore, CoolTown teaches *wherein the beacon is a Bluetooth beacon* (Field Guide to CoolTown, page 1, "Beacons")

27. **Claim 19:** CoolTown in view of Blow teach the system of Claim 17 as detailed above.

- Furthermore, CoolTown teaches *the beacon includes a transceiver for establishing two-way communication with a mobile device within range and thereby receiving identification information identifying the mobile device* (Kindberg, et al., page 3, §2.1 and §3.2.1 under "Direct Sensing" and "Indirect Sensing").
- CoolTown does not teach the further limitations recited in this claim.

Specifically, Blow teaches:

- *the verification system includes a data store for recording the credit in user accounts (page 12, lines 18-25); and*
- *the transceiver is connected to the verification system to pass the identification information to the verification system so that user account corresponding to the mobile device can be identified and credited (pg 12, line 39 – pg 13, line 7).*
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of CoolTown,

wherein a data transfer and identification mechanism including a verification database is presented, with the teaching of Blow, wherein a validation system that monitors the user's time in the network is presented. It would have been obvious to one of ordinary skill in the art since a layer in the system would be required for processing information such as user identification.

28. **Claim 20:** CoolTown in view of Blow teach the system of Claim 17 as detailed above. Furthermore, CoolTown teaches:

- *The at least one beacon transmits a sequence of identification data sets (Kindberg, et al., page 7, §3.2.1). CoolTown also teaches the verification system contains code for receiving a verification signal from the mobile device and validating the verification signal against the transmitted sequence of identification data sets (Kindberg, et al., pg8, §3.2.1)*
- *CoolTown, however, does not teach to determine the length of time that the mobile device remains within range of the at least one beacon. Blow does teach such a limitation (page 12, line 39 – page 13, line 2, where the CCLN monitors time origination and termination, i.e., the length of time the user is within a certain location).*
- *Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of CoolTown, wherein a data transfer mechanism including a verification database is presented, with the teaching of Blow, wherein a validation system that monitors the user's time in the network is presented. It would have been*

obvious to one of ordinary skill in the art since a layer in the system would be required for processing information such as duration.

29. **Claims 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Blow, WO 00/62564 (hereinafter referred to as "Blow") in view of Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location Awareness in HP's Cooltown* by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown") and further in view of Wynblatt, et al., US 6,219,969 B1 (hereinafter referred to as "Wynblatt").

30. Blow in view of CoolTown teaches the method of Claim 5 as detailed above. Blow in view of CoolTown, however, does not teach *wherein the beacon periodically polls the mobile device to determine whether the mobile device is within range*.

Wynblatt does teach such a limitation (Column 4, lines 23-25). Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of CoolTown in view of Blow with the teaching of Wynblatt, wherein mobile devices that constantly receive signals from transmitters is shown. It would have obvious to one of ordinary skill in the art because nomadic users would need to be "tracked."

31. **Claims 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow, WO 00/62564 (hereinafter referred to as "Blow") in view of Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location*

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Awareness in HP's Cooltown by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown") and further in view of Walker, et al., US 5,926,796 (hereinafter referred to as "Walker").

32. **Claim 9:** Blow in view of CoolTown teaches the method of Claim 7 as detailed above.

- Blow teaches *...broadcasts a sequence of datasets...* (pg 2, lines 8-12).
- Blow, however, does not teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2).
- Furthermore, Blow in view of CoolTown does not explicitly teach *...comprising an identification number that varies with each broadcast data set*. Walker does teach such a limitation (Column 8, Lines 8-22).
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of CoolTown in view of Blow, wherein the use of a unique identifier to identify a user is illustrated, with the teaching of Walker, wherein the use of a unique and varying authentication number to identify subscribers is illustrated, since a methodology of identifying mobile users is required for the proper allocation of credits.
- Blow also teaches *the mobile device accumulates the broadcast identification numbers in a register* (pg 2, lines 12-18).

- Blow also teaches *wherein the content of the register is presented for verification to determine the length of time the mobile device remained within the vicinity...*(pg 12, line 35 – pg 13, line 2 where it states that the mobile user's call time is monitored based on call origination and termination). Blow, however, does not teach a method of tracking a mobile device through the use of beacons. CoolTown, as detailed above, does teach such a limitation (Kindberg, et al, at page 4, §2.3 and generally in §2). Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow, with the teachings of CoolTown, wherein a method of tracking a mobile device through the use of beacons is taught. It would have been obvious since the use of short-range transceivers, such as beacons, to locate a mobile user is one mechanism for locating a user in a network (see Krishnan, pg 2) and incorporating a processing system which manipulates information, such as the time remained in a locale, would assist in providing rewards to "nomadic" users, thereby resulting in increased profits and stronger brand image for the retailer patronized by that mobile user.

33. **Claim 10:** Blow in view of CoolTown and further in view of Walker teaches the method of Claim 9 as detailed above.

- Blow in view of CoolTown does not explicitly teach *wherein the identification numbers are pseudo-random numbers*. Walker does teach such a limitation (Column 8, lines 8 – 23).

- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teachings of Blow in view of CoolTown with the teaching of Walker, wherein a system incorporating a pseudo-random identification number is taught. It would have been obvious since a pseudo-random number generation would decrease the likelihood of misidentifying the mobile user.

34. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wynblatt, et al., US 6,219,969 B1 (hereinafter referred to as "Wynblatt") in view of Blow, WO 00/62564 (hereinafter referred to as "Blow").

35. Wynblatt teaches:

- *A transceiver for receiving local transmitted signals containing identification information when the mobile device is located in a locale containing a beacon transmitting the signals* (Column 4, lines 9 – 13);
- *a memory store* (Column 4, lines 27 – 28);
- Wynblatt also teaches the use of a beacon to track a mobile device (Column 2, lines 30-32).
- Wynblatt does not teach the further limitations of this claim. Blow, however, does specifically teach *code for carrying out the steps of recording in the memory store information based on the broadcast identification data sets* (pg 2, lines 2 – 16) *and causing the mobile device to transmit the recorded information to a verification system so that the length of time the mobile*

device remains within the vicinity ... can be determined and the user of the mobile phone rewarded for remaining in the locale (pg 4, lines 27 – 36).

- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Wynblatt, wherein a mobile device is described, with the teaching of Blow, wherein a processing mechanism for providing user credit through a mobile device is described. It would have been obvious to one of ordinary skill in the art because data such as identification and user accounts are generally held in a data store for retrieval and verification.

36. **Claims 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynblatt, et al., US 6,219,969 B1 (hereinafter referred to as "Wynblatt") in view of Blow, WO 00/62564 (hereinafter referred to as "Blow") and further in view of Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location Awareness in HP's Cooltown* by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown").

37. **Claim 22:**

- Wynblatt in view of Blow teaches the apparatus of Claim 21 as detailed above.
- Wynblatt in view of Blow, however, does not teach *wherein the transceiver is a Bluetooth transceiver*. CoolTown does teach such a limitation (A Field Guide to CoolTown, "Beacons").

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- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Wynblatt in view of Blow with the teaching of CoolTown, wherein a signal transfer mechanism is described. It would have been obvious to one of ordinary skill in the art because the system is geared toward nomadic users and Bluetooth is a wireless network particularly adept to providing such users the most flexibility (Kindberg, et al., §3.2.3)

38. **Claim 23:**Wynblatt in view of Blow teaches the mobile device of Claim 21 as detailed above.

- Blow further teaches ... *broadcasts a sequence of data sets, each data set including an identification number that varies with each broadcast data set* (pg 2, lines 5 – 20).
- Blow further teaches *wherein the code accumulates the broadcast identification numbers in a register in the memory of the mobile device and transmits the contents of the register for verification to determine the length of time the mobile device remained within the vicinity...*(pg.4, line 25-26).
- Blow does not teach, however, the above cited steps using a beacon. CoolTown does teach the use of a beacon in determining a mobile user's location (Kindberg, et al., pg 13 §3.3, "Webbus").
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Wynblatt in view of Blow with the teaching of CoolTown, wherein a beacon is used to

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locate a mobile device. It would have been obvious to one of ordinary skill in the art because a beacon is one mechanism for determine location within a space (Krishnan, pg 2).

39. **Claims 24-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Blow, WO 00/62564 (hereinafter referred to as "Blow") in view of Hewlett-Packard's "Cooltown" project on www.cooltown.hp.com (includes documents entitled *People, Places, Things: Web Presence for the Real World* by T. Kindberg, et al., *Location Awareness in HP's Cooltown* by V. Krishnan, and HP's *A Field Guide to CoolTown* collectively hereinafter referred to as "CoolTown") and further in view of information disclosed in Newcom Technology's company website (<http://www.newcomglobal.com>, accessible on www.archive.org hereinafter referred to as "Newcom").

40. **Claim 24** contains substantially similar method limitations as Claim 1 above and, accordingly, can be rejected for the same reasons, except as to the limitation of debits.

- Blow in view of CoolTown does not teach the debit method. Newcom does teach the method of debiting a mobile phone (Newcom Website, "Applications: Pre-Paid Mobile" and "Applications: Ticketing & Coupons").
- Therefore, it would have been prima facie obvious at the time the invention was made to have been motivated to combine the teaching of Blow in view of CoolTown with the teaching of Newcom, wherein a debiting method is introduced. It would have been obvious to one of ordinary skill in the art because crediting and debiting a user account are standard business practices.

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41. **Claim 25** contains substantially similar method limitations as Claim 4 above and, accordingly, can be rejected for the same reasons, except as to the limitation of debits.

The limitation of debits is substantially similar to the method limitation of Claim 24 above. Therefore, it can be rejected for the same reasons here.

42. **Claim 26** contains substantially similar method limitations as Claim 2 above and, accordingly, can be rejected for the same reasons, except as to the limitation of debits.

The limitation of debits is substantially similar to the method limitation of Claim 24 above. Therefore, it can be rejected for the same reasons here.

43. **Claim 27** contains substantially similar method limitations as Claim 3 above and, accordingly, can be rejected for the same reasons, except as to the limitation of debits.

The limitation of debits is substantially similar to the method limitation of Claim 24 above. Therefore, it can be rejected for the same reasons here.

44. **Claim 28** contains substantially similar method limitations as Claim 13 above and, accordingly, can be rejected for the same reasons.

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Owensby, US 6,647,257 B2, teaches a system and method for providing targeted messages based on wireless mobile location.
- *iButton Applications*, www.ibutton.com (accessed from www.archive.org), teaches applications using the iButton, including the tracking of devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalpreet S. Saluja whose telephone number is (571) 270-1834. The examiner can normally be reached on Monday-Thursday, 7:30AM-5PM est, ALT Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Reagan can be reached on (571) 272-6710. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Dalpreet S. Saluja
Patent Examiner – Business Methods
4/23/2007


THOMAS A. DIXON
PRIMARY EXAMINER